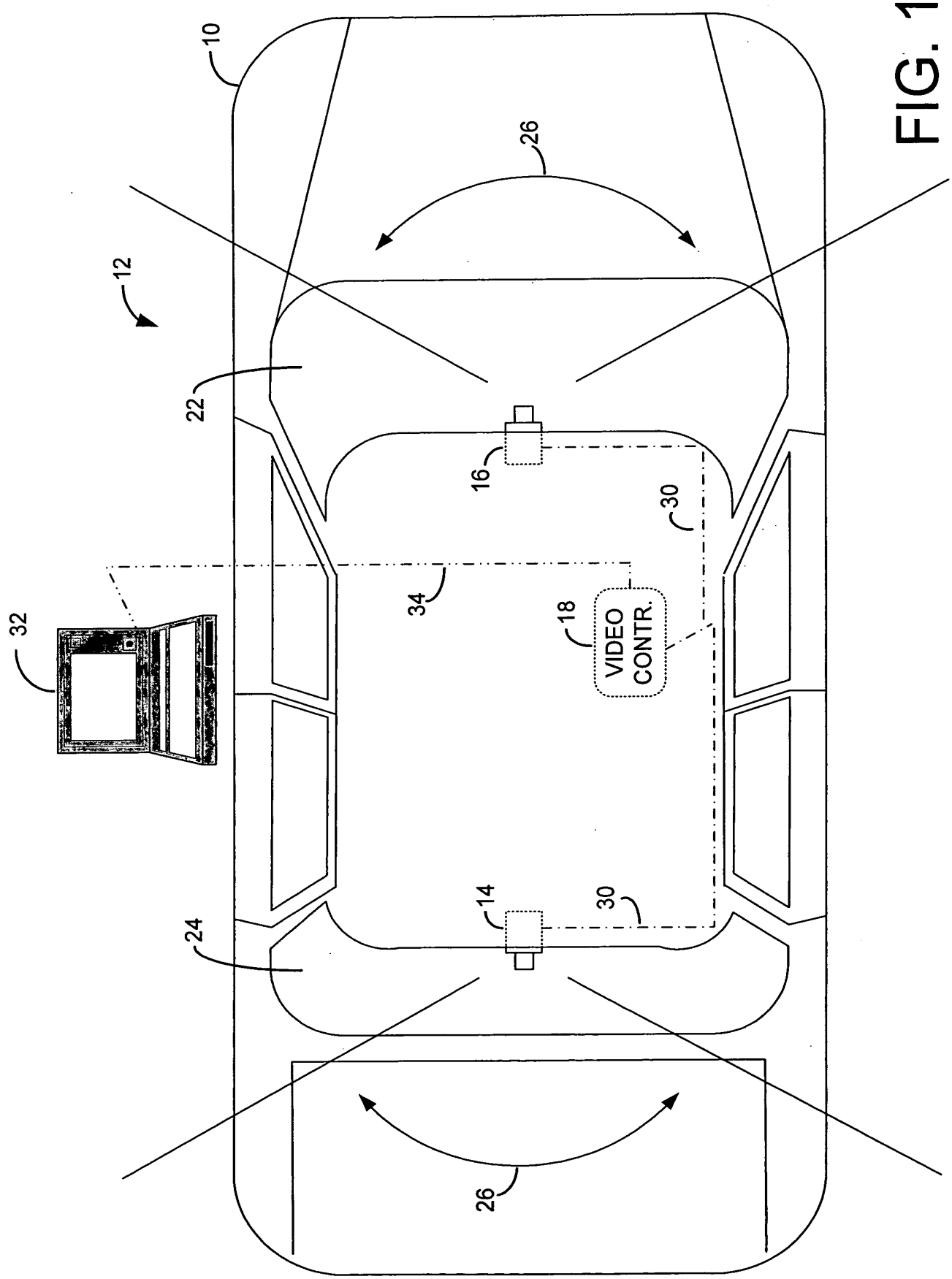

FIG. 1

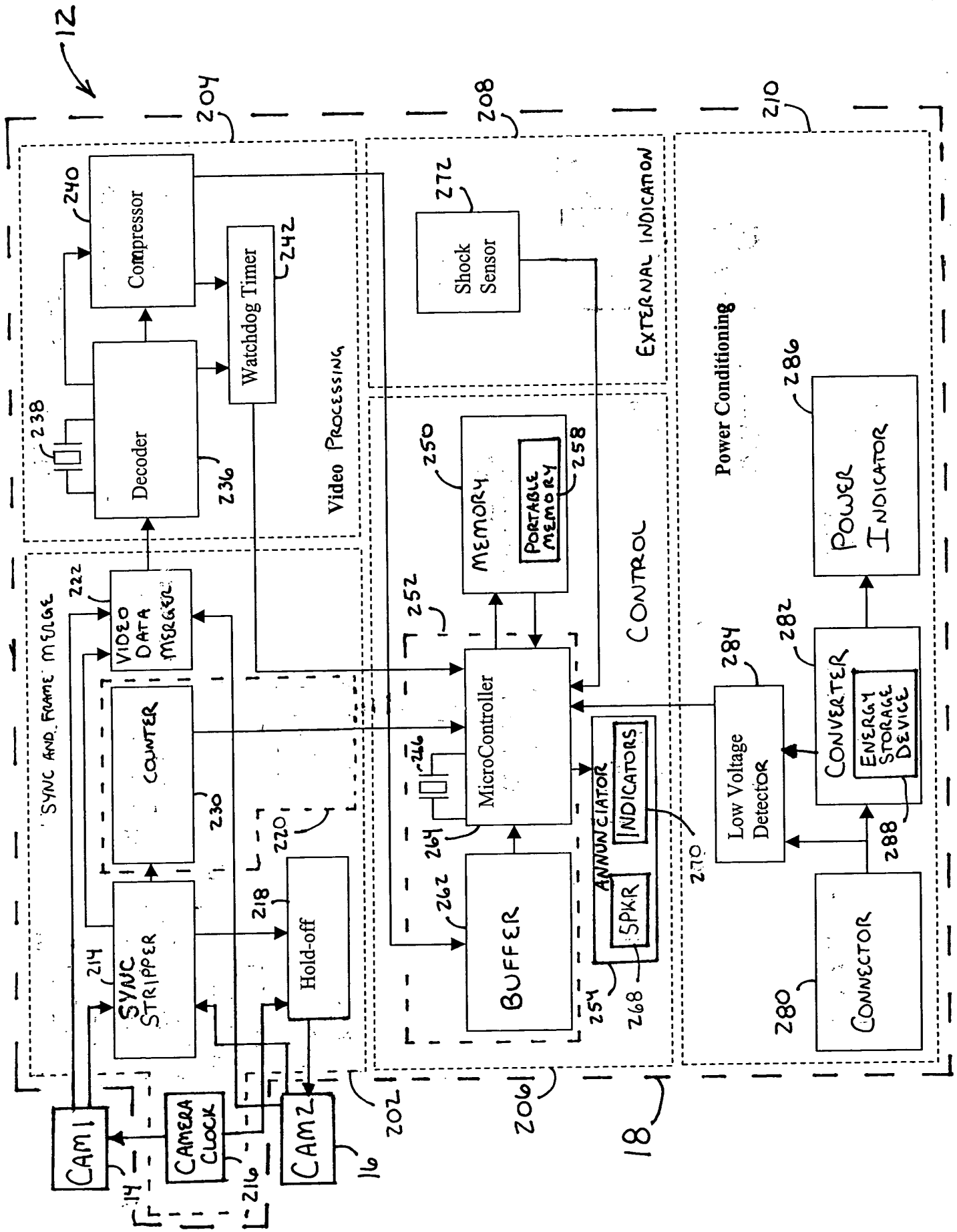
12
204
208
210
Video Processing
EXTERNAL INDICATION
Power Conditioning
CONTROL
Compressor
240
Watchdog Timer
242
Shock Sensor
272
Decoder
238
236
VIDEO DATA MERGER
222
SYNC AND FRAME MERGE
MEMORY
250
PORTABLE MEMORY
258
252
POWER INDICATOR
286
COUNTER
230
MicroController
246
Low Voltage Detector
284
CONVERTER
282
ENERGY STORAGE DEVICE
SYNC STRIPPER
214
Hold-off
218
220
264
262
BUFFER
ANNUNCIATOR
INDICATORS
SPKR
254
268
270
288
CONNECTOR
280
CAM1
CAMERA CLOCK
CAM2
14
216
16
202
206
18

FIGURE 2

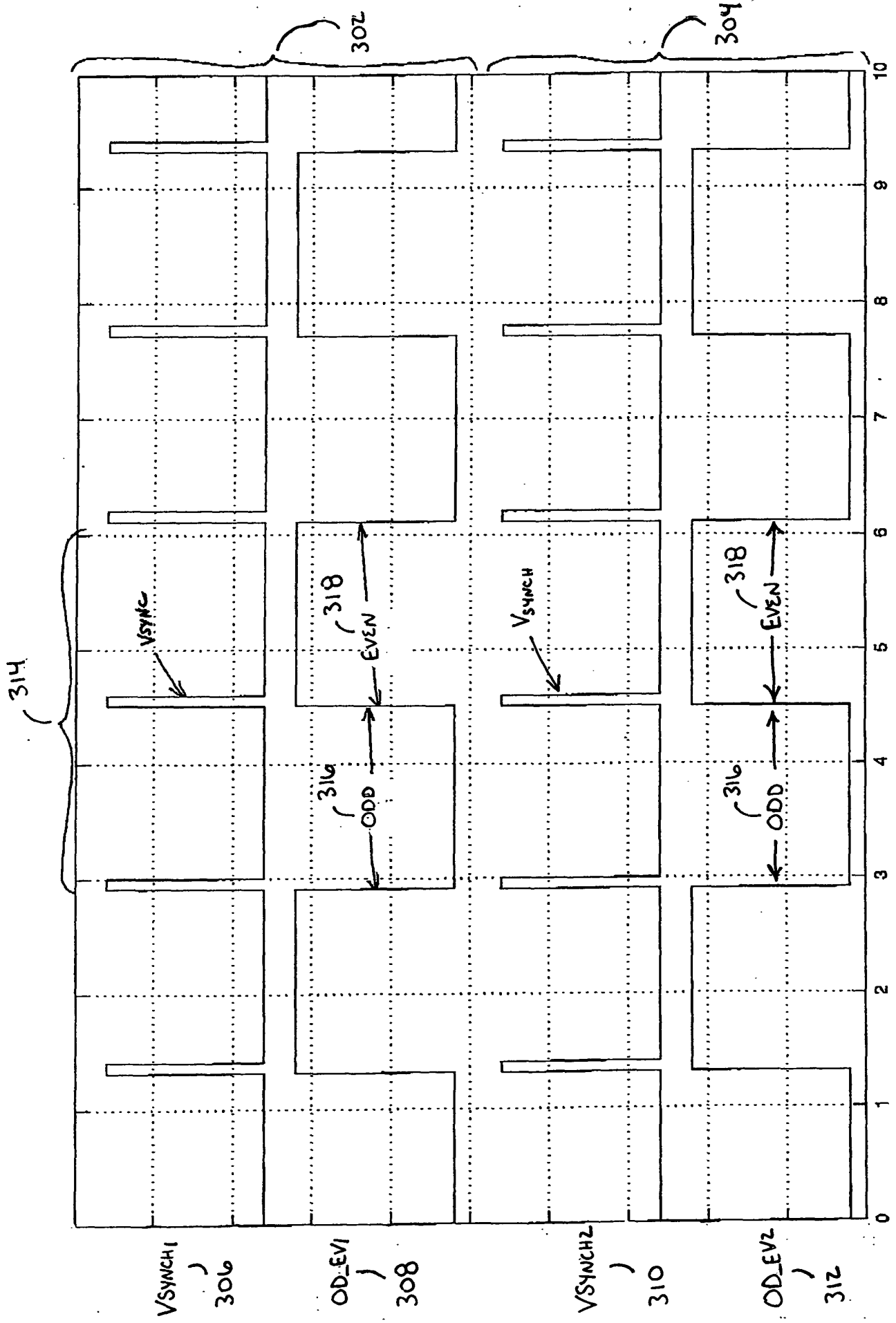
302
304
314
VSYNC
318
EVEN
316
ODD
VSYNCH
318
EVEN
316
ODD
VSYNCH1
306
OD_EV1
308
VSYNCH2
310
OD_EV2
312
0
1
2
3
4
5
6
7
8
9
10

FIGURE 3

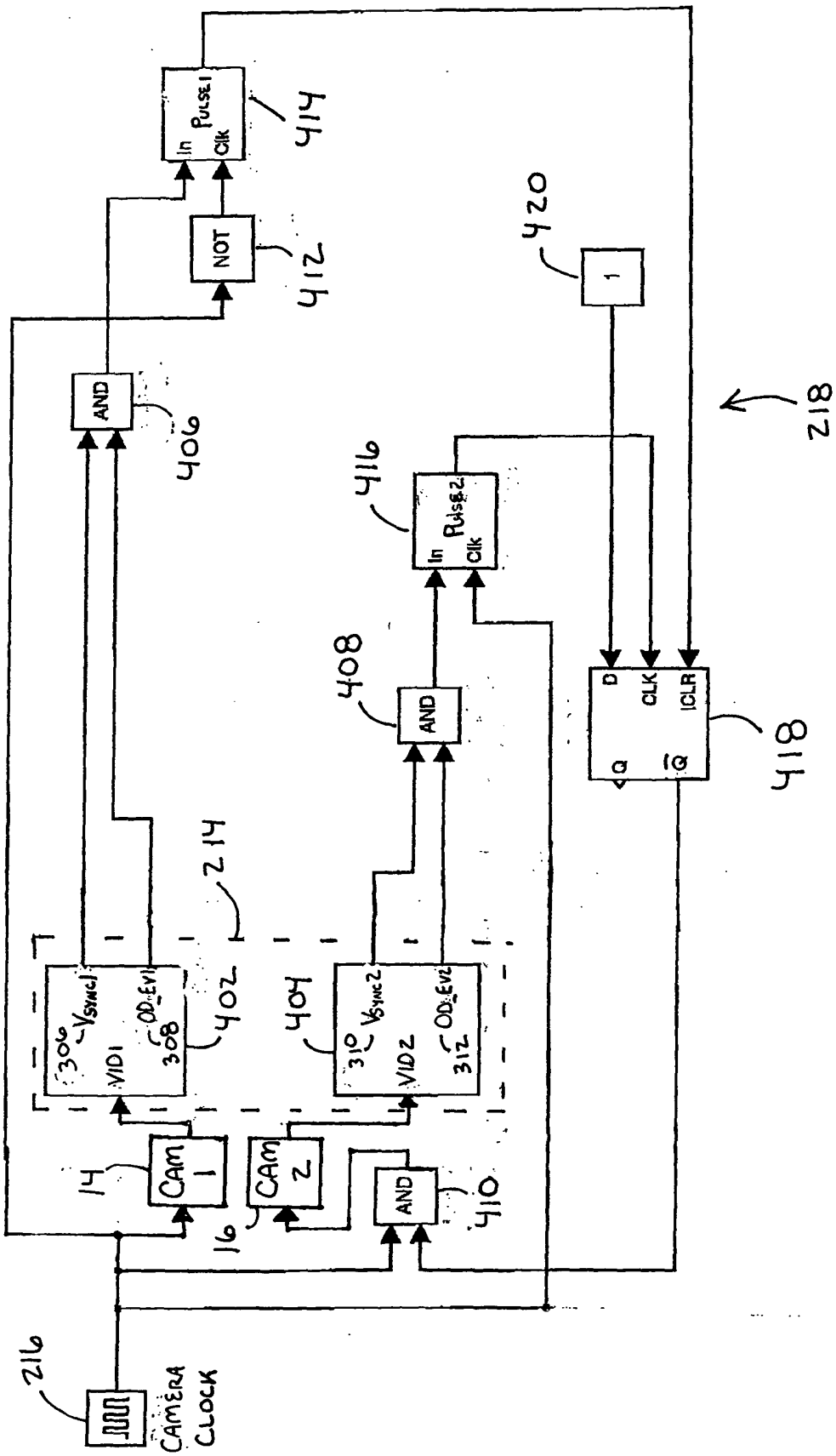
CAMERA CLOCK
216
CAM 1
14
CAM 2
16
AND
410
VSYNC1
VID1
ODD_EVEN1
306
308
402
VSYNC2
VID2
ODD_EVEN2
310
312
404
214
AND
406
AND
408
NOT
412
PULSE1
In
Clk
414
PULSE2
In
Clk
416
1
420
D
CLK
ICLR
Q
IQ
418
218

FIGURE 4

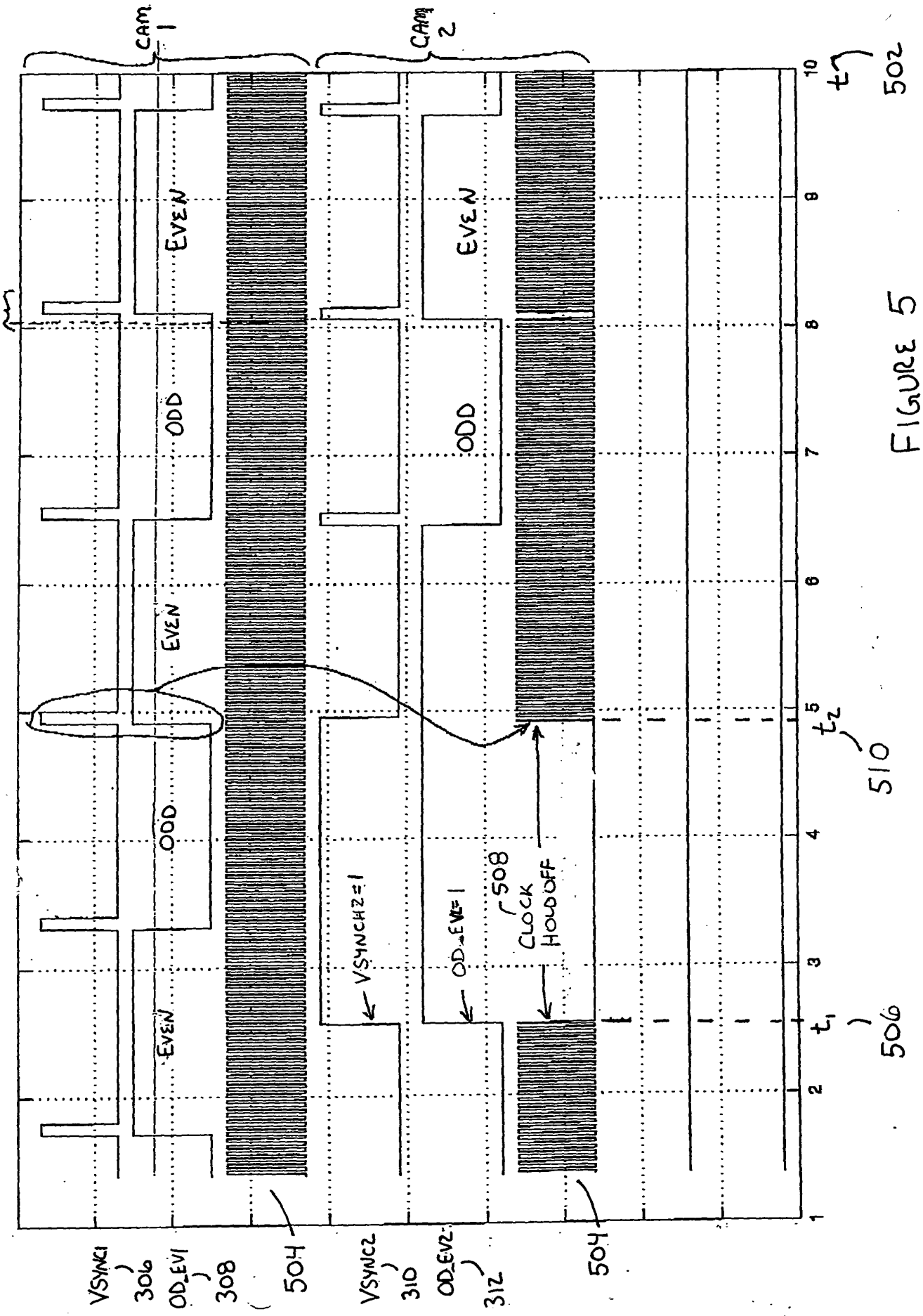
CAM 1
CAM 2
EVEN
ODD
EVEN
ODD
EVEN
ODD
512
502
510
506
508
VSYNC2=1
ODEVE=1
CLOCK HOLDOFF
VSYNC1 306
ODEVI 308
504
VSYNC2 310
ODEV2 312
504
1
2
3
4
5
6
7
8
9
10
t1
t2

FIGURE 5

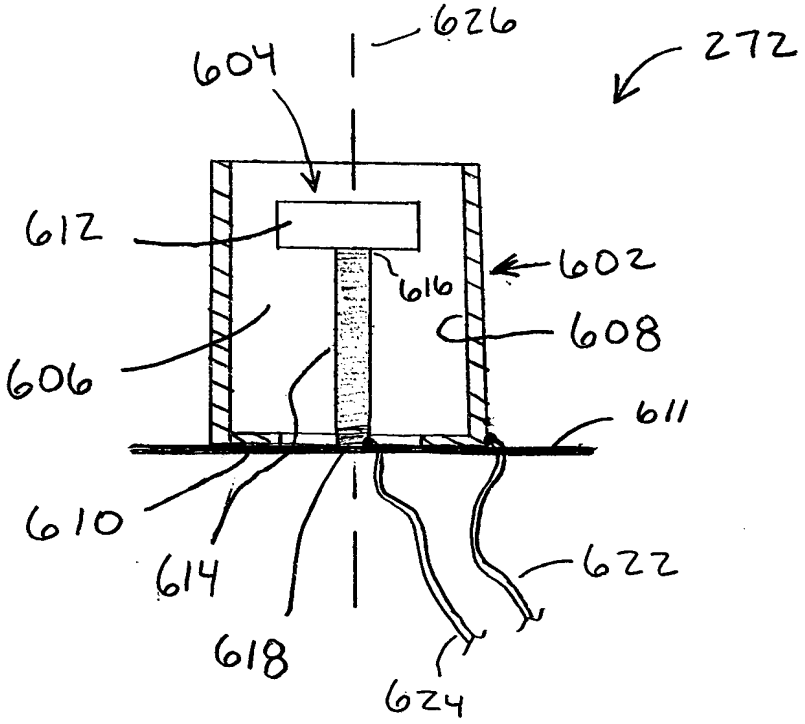

FIG. 6

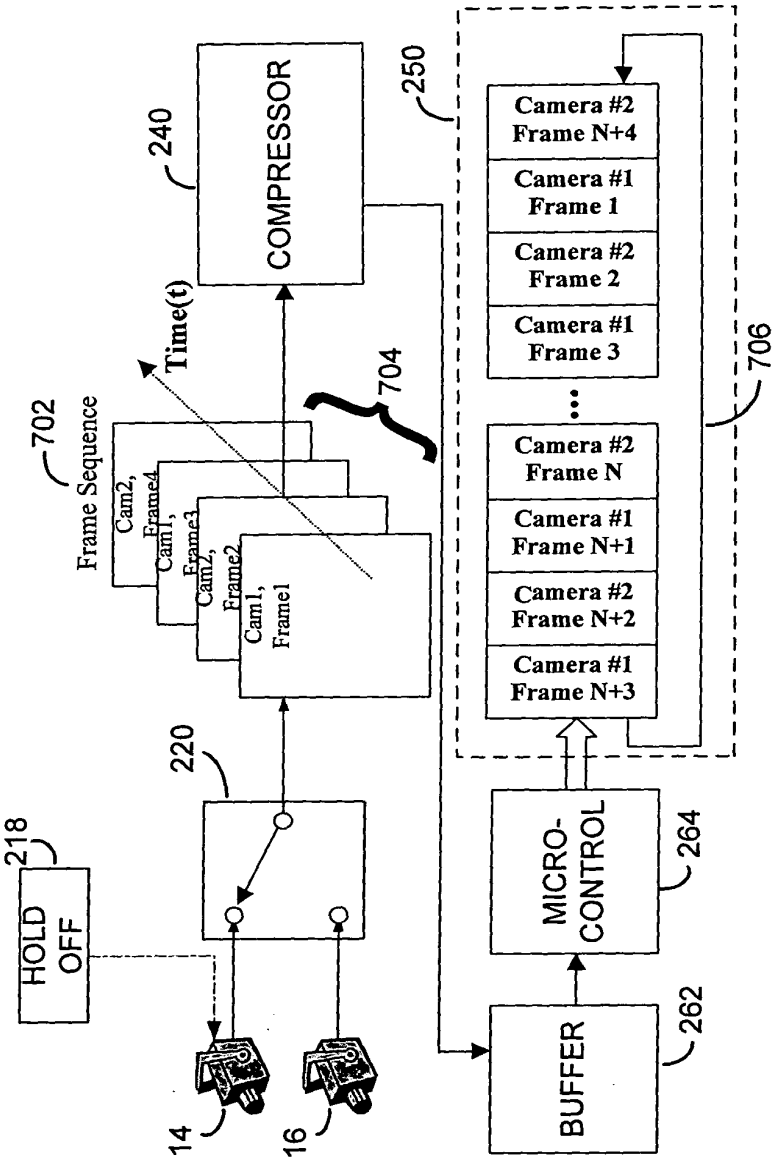
COMPRESSOR
240
250
Time(t)
704
702
Frame Sequence
Cam2, Frame4
Cam1, Frame3
Cam2, Frame2
Cam1, Frame1
220
218
HOLD OFF
14
16
Camera #2 Frame N+4
Camera #1 Frame 1
Camera #2 Frame 2
Camera #1 Frame 3
Camera #2 Frame N
Camera #1 Frame N+1
Camera #2 Frame N+2
Camera #1 Frame N+3
706
MICRO-CONTROL
264
BUFFER
262

FIG. 7

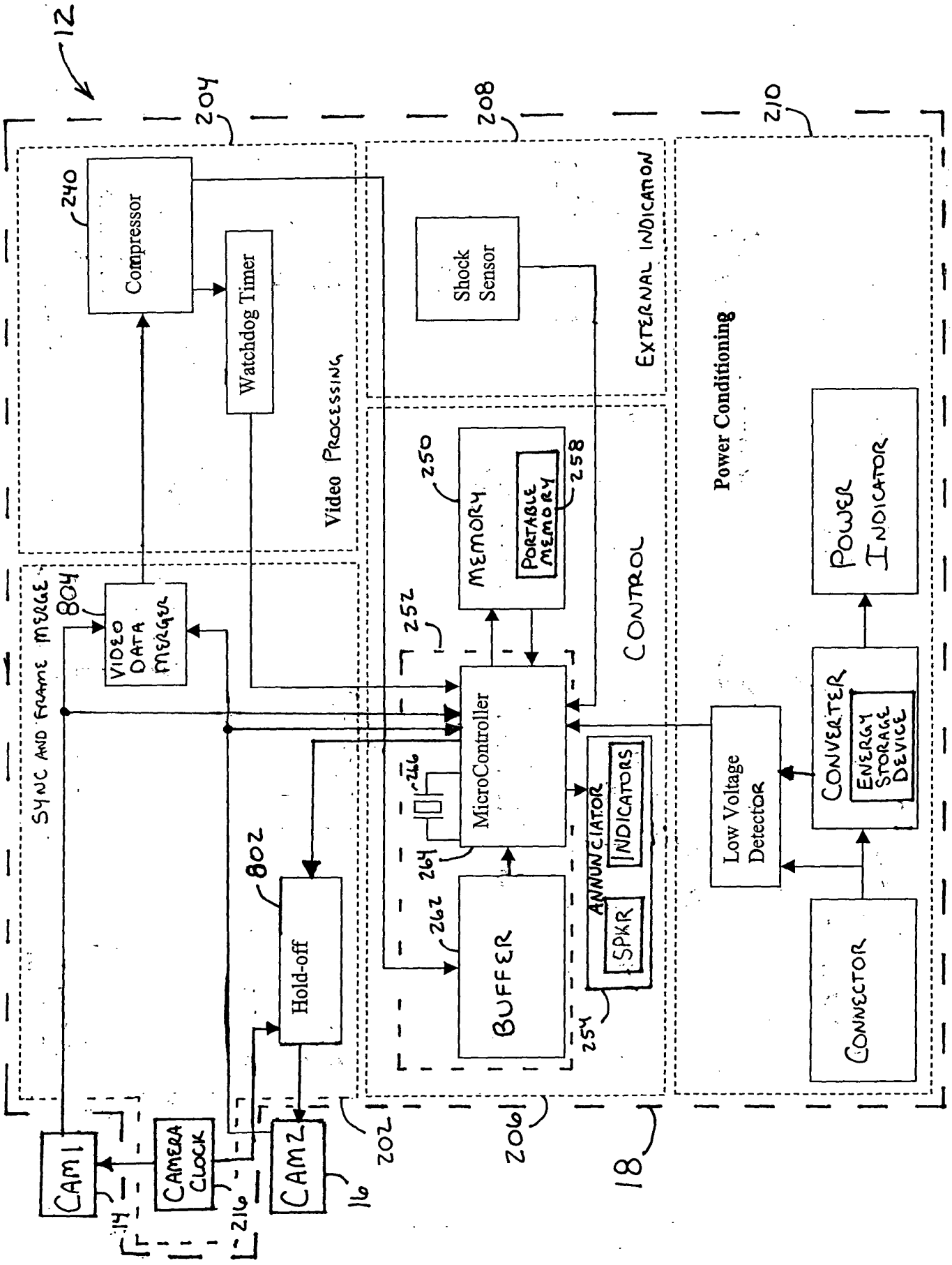
12
204
208
210
240
Compressor
Watchdog Timer
Video Processing
Shock Sensor
EXTERNAL INDICATOR
Power Conditioning
250
MEMORY
PORTABLE MEMORY
258
252
CONTROL
POWER INDICATOR
SYNC AND FRAME MERGE
804
VIDEO DATA MERGER
MicroController
246
264
262
BUFFER
ANNUNCIATOR
INDICATORS
SPKR
254
802
Hold-off
Low Voltage Detector
CONVERTER
ENERGY STORAGE DEVICE
CONNECTOR
CAM1
CAMERA CLOCK
CAM2
14
216
16
202
206
18

FIGURE 8